Stack Interface Module for 500 Series Switches

User Guide

1 Quick Start

Installing the module

Follow these instructions to install a Stack Interface Module in your Intel Express 500 Series Switch:

Warning Modules are not designed to be installed in, or removed from, the switch while it is in operation. You must power off the switch before installing or removing the module.

1 Ensure that your working area is static-free before opening the bag containing the Stack Interface Module.

Electrostatic Sensitive Device

Do not handle the printed circuit board unless the working area is static-free!

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2   Turn off the power to the switch. Remove the plate covering the slot on the Express 500 Series Switch.

    Note   For 510T, use Slot A. For 550T and 550F, use either slot

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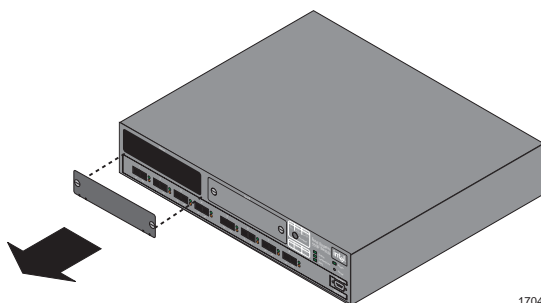
3   Insert the Stack Interface Module into the slot. Place your thumbs just beneath the screws on the front plate of the module and push the module in until it clicks into position. Secure it using the retaining screws.

    Note   If the module does not click into position, refer to the Intel Support Web Page *(http://support.intel.com)* for full instructions on how to install the module successfully.
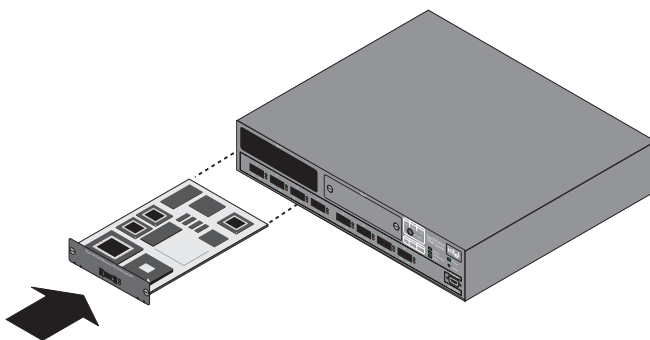
4   Using another Express 500 Series Switch, repeat steps 1 to 3 with another Stack Interface Module.

5 Plug in the Stack Cable (supplied with the module), and secure it using the latches on the connector.
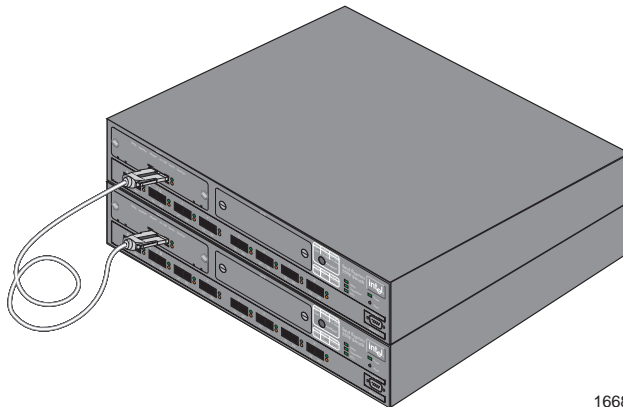
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6 Turn on the power to the switches and verify the link using the LEDs on the Module.

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Stack Interface Module

Overview

This guide covers the Intel Stack Interface Module for the 500 Series Switch (Intel Order Code: ES500MSI). Each module is delivered with a Stacking Cable (Intel Order Code: ES500SC).

The Stack Interface Module can only be used with Intel 500 Series Switches

Introduction

When to use the module

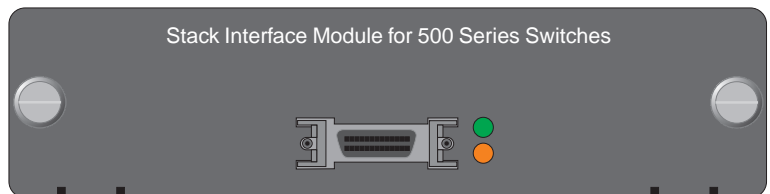The Stack Interface Module provides a high-speed connection between two Intel Express 500 Series Switches (when a module is installed in each switch).

View of the front plate

The front plate of the Stack Interface Module is shown below:

Stack Interface Module for 500 Series Switches

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Installing the module   To install the module, follow the instructions in chapter 1.

Connecting the Modules

Use the Stacking Cable   The Stacking Cable is one meter (39 inches) long and connects two Stack Interface Modules (each inserted in an Intel Express 500 Series Switch).

Connecting and disconnecting the cable   The cable has a clip-on connector. To connect the cable, push it firmly onto the module's port. To disconnect the cable, use your thumb and forefinger to squeeze the latches (on the connector) together and pull the connector away from the port.

Understanding the LEDs   After you have connected the modules and powered the switches on, each module has two LED indicators: green and orange These indicate the following:

Green	Orange	Indicates
Off	Off	Port enabled, no link.
Blinking	Off	Link and data traffic.
Solid	Off	Link.
Off	Solid	Port disabled by management.
Solid	Solid	Port disabled by a fault.

Configuring the switches   After you have used the cable to connect the Stack Interface Modules, you can still configure each of the switches separately.

Stack Interface Module Specifications

Physical specification

The Stacking Interface Module (Intel Order Code: ES500MSI) has the following specification:

Number of ports	One connector
Bandwidth	2.1Gbps
Dimensions	Width: 149mm (5.9in.) Height: 37mm (1.5in.) Depth: 238mm (9.4in.)
Weight (approximate)	0.18kg. (0.40lb.)

Stacking Cable Specifications

Physical specification

The Stacking Cable (Intel Order Code: ES500SC) has the following specification:

Cable	Seven 100 ohm shielded differential pair signal lines
	One system initialization signal line
	U.L. recognized
Connector	Twenty six position shielded plug connector
	Squeeze to release latching
Link Length	1 meter (39 inches)

Performance specification

The performance specifications are:

Differential skew	Less than 100ps for 3 meters
Attenuation	Less than 2dB per 3 meters at 200MHz
Differential Impedance	100 +/- 5 Ohms

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Limited Hardware Warranty

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This warranty gives you specific legal rights and you may have other rights which vary from state to state. All parts or components contained in this product are covered by Intel's limited warranty for this product; the product may contain fully tested, recycled parts, warranted as if new. For warranty information call one of the numbers below.

Returning a Defective Product (RMA)

Before returning any product, contact an Intel Customer Support Group and obtain an RMA number by calling the non-toll free numbers below:

Country	Number	Language
France	+44 1793 404988	French
Germany	+44 1793 404777	German
Italy	+44 1793 404141	Italian
UK	+44 1793 404900	English

If the Customer Support Group verifies that the product is defective, they will have the Return Material Authorization Department issue you an RMA number to place on the outer package of the product. Intel cannot accept any product without an RMA number on the package.

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This limited hardware warranty shall be governed by and construed in accordance with the laws of England and Wales. The courts of England shall have exclusive jurisdiction regarding any claim brought under this warranty.

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The user is cautioned that changes and modifications made to the equipment without approval of the manufacturer could void the user's authority to operate this equipment.

Manufacturer Declaration

Intel declares that the Express 500 Series Switches comply with the EU Directive 89/336/EEC, using the EMC standards EN55022 and EN50082-1. These products also meet EU Directives 74/23/EEC and 93/68/ and are certified by DEMKO to be compliant with EN 60950/A1/A2/A3 and by UL to be compliant with UL 1950 and CSA -C22.2 No. 950. These products have been tested and verified to meet CISPR 22 Class A requirements and are registered with VCCI Class 1 products.

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

WARNING

The system is designed to operate in a typical office environment. Choose a site that is:

- Clean and free of airborne particles (other than normal room dust).

- Well ventilated and away from sources of heat including direct sunlight.

- Away from sources of vibration or physical shock.

- Isolated from strong electromagnetic fields produced by electrical devices.

- In regions that are susceptible to electrical storms, we recommend you plug your system into a surge suppressor and disconnect telecommunication lines to your modem during an electrical storm.

- Provided with a properly grounded wall outlet.

Do not attempt to modify or use the supplied AC power cord if it is not the exact type required.

Ensure that the system is disconnected from its power source and from all telecommunications links, networks, or modems lines whenever the chassis cover is to be removed. Do not operate the system with the cover removed.

AVERTISSEMENT

Le système a été conçu pour fonctionner dans un cadre de travail normal. L'emplacement choisi doit Ítre:

- Propre et dépourvu de poussière en suspension (sauf la poussière normale).

- Bien aèrè et loin des sources de chaleur, y compris du soleil direct.

- A l'abri des chocs et des sources de ibrations.

- Isolé de forts champs magnétiques géenérés par des appareils électriques.

- Dans les régions sujettes aux orages magnétiques il est recomandé de brancher votre système à un supresseur de surtension, et de débrancher toutes les lignes de télécommunications de votre modem durant un orage.

- Muni d'une prise murale correctement mise à la terre.

Ne pas utiliser ni modifier le câble d'alimentation C. A. fourni, s'il ne correspond pas exactement au type requis.

Assurez vous que le système soit débranché de son alimentation ainsi que de toutes les liaisons de télécomunication, des réseaux, et des lignes de modem avant d'enlever le capot. Ne pas utiliser le système quand le capot est enlevé.

WARNUNG

Das System wurde für den Betrieb in einer normalen Büroumgebung entwickelt. Der entwickelt. Der Standort sollte:

- sauber und staubfrei sein (Hausstaub ausgenommen);
- gut gelüftet und keinen Heizquellen ausgesetzt sein (einschliefllich direkter Sonneneinstrahlung);
- keinen Erschütterungen ausgesetzt sein;
- keine starken, von elektrischen Geräten erzeugten elektromagnetischen Felder aufweisen;
- in Regionen, in denen elektrische Stürme auftreten, mit einem Überspannungsschutzgerät verbunden sein; während eines elektrischen Sturms sollte keine Verbindung der Telekommunikationsleitungen mit dem Modem bestehen;
- mit einer geerdeten Wechselstromsteckdose ausgerüstet sein.

Versuchen Sie nicht, das mitgelieferte Netzkabel zu ändern oder zu verwenden, wenn es sich nicht um genau den erforderlichen Typ handelt.

Das System darf weder an eine Stromquelle angeschlossen sein noch eine Verbindung mit einer Telekommunikationseinrichtung, einem Netzwerk oder einer Modem-Leitung haben, wenn die Gehäuseabdeckung entfernt wird. Nehmen Sie das System nicht ohne die Abdeckung in Betrieb.

AVVERTENZA

Il sistema è progettato per funzionare in un ambiente di lavoro tipico. Scegliere una postazione che sia:

- Pulita e libera da particelle in sospensione (a parte la normale polvere presente nell'ambiente).
- Ben ventilata e lontana da fonti di calore, compresa la luce solare diretta.
- Al riparo da urti e lontana da fonti divibrazione.
- Isolata dai forti campi magnetici prodotti da dispositivi elettrici.
- In aree soggette a temporali, è consigliabile collegare il sistema ad un limitatore di corrente. In caso di temporali, scollegare le linee di comunicazione dal modem.
- Dotata di una presa a muro correttamente installata.

Non modificare o utilizzare il cavo di alimentazione in c. a. fornito dal produttore, se non corrisponde esattamente al tipo richiesto.

Prima di rimuovere il coperchio del telaio, assicurarsi che il sistema sia scollegato dall'alimentazione, da tutti i collegamenti di comunicazione, reti o linee di modem. Non avviare il sistema senza aver prima messo a posto il coperchio.

ADVERTENCIAS

El sistema está diseñado para funcionar en un entorno de trabajo normal. Escoja un lugar:

- Limpio y libre de partículas en suspensión (salvo el polvo normal)
- Bien ventilado y alejado de fuentes de calor, incluida la luz solar directa.
- Alejado de fuentes de vibración.

- Aislado de campos electromagnéticos fuertes producidos por dispositivos eléctricos.

- En regiones con frecuentes tormentas eléctricas, se recomienda conectar su sistema a un eliminador de sobrevoltage y desconectar el módem de las líneas de telecomunicación durante las tormentas.

- Previsto de una toma de tierra correctamente instalada.

No intente modificar ni usar el cable de alimentación de corriente alterna, si no se corresponde exactamente con el tipo requerido.

Asegúrese de que cada vez que se quite la cubierta del chasis, el sistema haya sido desconectado de la red de alimentación y de todos lo enlaces de telecomunicaciones, de red y de líneas de módem. No ponga en funcionamiento el sistema mientras la cubierta esté quitada.

Automated Support

You can reach Intel's automated support services 24 hours a day, every day at no charge. The services contain the most up-to-date information about Intel products. You can access installation instructions, troubleshooting information, and general product information.

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